REMARKS

This paper responds to the Office Action dated July 6, 2004. Enclosed please find Form PTO-2038 and Form PTO/SB/22.

**Abstract.** The Examiner objects to the Abstract. A new Abstract is provided which is tied more closely to the claims of this divisional application.

**Art rejection**. All claims were rejected as supposedly obvious in view of either a two-way combination of a US Pat. No. 6072904 to Desai et al. ("Desai") with a US Pat. No. 5721902 to Schultz ("Schultz"), or a three-way combination of Desai, Schultz, and US Pat. No. 6385596 to Wiser et al. ("Wiser").

The Examiner has rejected pending claim 1 as supposedly obvious over the two-way combination of Desai and Schultz. For convenience claim 1 is reproduced here:

> A method for use with a system storing digital media records and comprising a search engine searching said stored digital media records, the method comprising the steps of:
>
> receiving search requests from users;
>
> logging the search requests;
>
> expanding the search requests;
>
> applying a statistical clustering algorithm, thereby grouping similar search requests together;
>
> identifying, using a semantic net hierarchy, a lowest-level term in the hierarchy that subsumes all of the queries in a grouping of search requests;
>
> communicating the identified term to a user.

The Examiner is respectfully reminded that "digital media records" and "search requests" are two very different things. Essentially one relates to searches and the other relates to the *results* of the searches. To make an example familiar to the Examiner, consider that the Examiner may perform a *search* directed to "clustering" in the USPTO's patent database. When the search is performed, the results may include, for example, US Pat. No. 6,072,904. In this example, the search request is a search for records containing the word "clustering", and the results of the search are no patent, one patent, or more than one patent.

Importantly, the clustering of Claim 1 is directed specifically to "search requests." Claim

1 at part [d] recites that a clustering algorithm is applied to "search requests" which have been previously received, logged, and expanded.

In contrast, Desai only applies "clustering" to the data items that are being searched, that is, the data records. Desai teaches away from the invention by applying its clustering only to something completely different than the target of the clustering of the claim.

It may be helpful to the Examiner to refer to paragraphs 89 and following, which explained this distinction in the application as filed:

> Clustering involves combining user search queries in such a way that the searches can be analyzed usefully to provide answers to business questions. Clustering has received considerable attention in document information retrieval (IR) and more recently, in video IR as a means of refining retrieval results based on user preferences or profiles, and to characterize the marketplace. The prior art contains many examples of clustering applied in information retrieval systems, but they all apply to search results returned to users rather than search queries submitted by users. In the system according to the invention, we cluster search queries by topic. We then use that information to adjust the collections of stored files so that the file collections will better meet users' needs.

Desai is merely an example of what was discussed here in the application as filed – a system that does no more than apply clustering to search results. In contrast the claimed invention calls for clustering to be applied to the *search queries*.

The undersigned has diligently studied both of the references which the Examiner has cited, and is unable to find any hint or suggestion of the claimed application of clustering to *search queries*.

Reconsideration is requested. Claims 2 and 3 depend from claim 1 and thus should be allowed for the same reasons.

Independent claim 4 is reproduced for the Examiner's convenient reference:

> A method for use with a system storing digital media records and comprising a search engine searching said stored digital media records, the method comprising the steps of:
>
> receiving search requests from users;
>
> by the search engine, searches based upon the search requests, yielding respective search results, each search result defining selected digital media records, the digital media records each having associated metadata;
>
> logging the search results and the metadata associated with digital media records

selected therein;

expanding the metadata, defining expanded query metadata results;

applying a statistical clustering algorithm, thereby grouping similar expanded query metadata results together;

identifying, using a semantic net hierarchy, a lowest-level term in the hierarchy that subsumes all of the expanded query metadata results in the grouping of expanded query metadata results;

communicating the identified term to a user.

This claim is limited in that clustering is applied to query metadata, not to the data records. The undersigned has diligently studied both of the references which the Examiner has cited, and is unable to find any hint or suggestion of the claimed application of clustering to *query metadata results*. Reconsideration is requested. Claims 5 and 6 depend from claim 4 and should be allowed for the same reasons.

Claim 7 is:

A method for use with a system storing digital media records and comprising a search engine searching said stored digital media records, the method comprising the steps of:

receiving search requests from users;

performing, by the search engine, searches based upon the search requests, yielding respective search results, each search result defining selected digital media records or being empty;

logging the search requests for which the search result is empty;

expanding the logged search requests;

applying a statistical clustering algorithm to the logged search requests, thereby grouping similar search requests together;

communicating a group of search requests to a user.

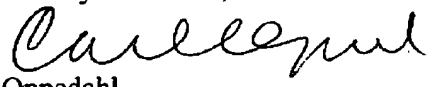
Claim 7, like claim 1, is limited in that clustering is applied to logged search results (not to data records in the database, as in Desai). It should be allowed for the same reasons as given above in connection with claim 1. Claims 8 and 9 depend from claim 7 and should be allowed for the same reasons.

Claim 10 is:

> A method for use with a system storing digital media records and comprising a search engine searching said stored digital media records, the system permitting user expressions of interest in particular stored digital media records, the method comprising the steps of:
>
> search requests from users;
>
> performing, by the search engine, searches based upon the search requests, yielding respective search results, each search result defining selected digital media records;
>
> logging the search requests for which a user has expressed interest in a selected digital media record;
>
> expanding the logged search requests;
>
> applying a statistical clustering algorithm to the logged search requests, thereby grouping similar search requests together;
>
> communicating a group of search requests to a user.

Claim 10, like claim 1, is limited in that clusting is performed upon the logged search requests, a feature not found in, and taught away from, in the cited reference. Reconsideration is requested for claim 10, as well as for claims 11-15 which depend therefrom.

Respectfully submitted,



Carl Oppedahl
PTO Reg. No. 32,746
Oppedahl & Larson LLP
P O Box 5068
Dillon, CO 80435-5068
telephone 970-468-6600